1-2012

The Second Glass Ceiling Impedes Women Entrepreneurs

Douglas A. Bosse
University of Richmond, dbosse@richmond.edu

Porcher L. Taylor III

Recommended Citation

Bosse, Douglas A., and Porcher L. Taylor, III. "The Second Glass Ceiling Impedes Women Entrepreneurs." *The Journal of Applied Management and Entrepreneurship* 17, no. 1 (January 2012): 52-68.

The Journal of Applied Management and Entrepreneurship, 2012, Vol. 17, No.1

JAME

The Second Glass Ceiling Impedes Women Entrepreneurs

Douglas A. Bosse, University of Richmond
Porcher L. Taylor III, University of Richmond

Executive Summary

The glass ceiling phenomenon that impedes the advancement of talented women professionals into senior executive roles inside large corporations is widely recognized in society, studied in the management literature, taught in business schools, and tangibly felt by many women executives. Outside the corporate setting, we show that a second glass ceiling exists for women entrepreneurs and women small business owners. This second glass ceiling is a gender bias that obstructs women-owned small firms from accessing the financial capital required to start new firms and fuel the growth of existing firms. This paper (1) defines the second glass ceiling phenomenon, (2) provides evidence of its existence, causes and effects, and (3) proposes what both women entrepreneurs and financial capital managers should do to mitigate its deleterious effects.

Introduction

Ever since the publication of the seminal book that birthed the term "glass ceiling" (Morrison, White, & Van Velsor, 1992), that memorable metaphor for the invisible barrier that impedes the senior management advancement of talented women professionals inside corporations has seemingly become ubiquitous in management literature, business school curricula, and the global psyche. As evidence, by December 2010 the Amazon.com database had 242 books with "glass ceiling" in the title and 337 books that include the keyword phrase "glass ceiling." Scholarly journals also help to disseminate information about the glass ceiling phenomenon by reporting numerous studies that confirm its existence inside large firms (e.g., Daily, Certo, & Dalton, 1999; Helfat, Harris, & Wolfson, 2006; Jordan, Clark, & Waldron, 2007). Today, multiple business courses including organizational behavior, ethics, and business law might be considered incomplete without highlighted mention and discussion of the glass ceiling phenomenon.

While teaching about the glass ceiling has greatly broadened awareness of this gender-based inequity in the corporate workplace, the disappointing truth is that the phenomenon continues to influence behavior among corporate leaders. Several scholars suggest frustrated women executives often choose to leave the corporate world in order to escape the effects of the glass ceiling by forming their own small firms (e.g., Mattis, 2004; Orhan & Scott, 2001; Winn, 2004). The underlying hypothesis is that the glass ceiling – a phenomenon that by definition is specific to large firms – cannot prevent women business owners from serving as chief executive of their own firm and realizing the rewards they deserve.

However, evidence is growing that the strategy of leaving the corporate world in order to escape gender bias often fails (Patterson & Mavin, 2009). This is because women business owners typically encounter other forms of systemic gender bias that constrain their performance. Specifically, based on gender, women business owners face a disadvantage in raising capital (Aldrich, Elam, & Reese, 1997; Bellucci, Borisov, & Zazzaro, 2010; Brush, 1997; Carter & Rosa, 1998; Carter, Shaw, Lam & Wilson, 2007; Coleman & Robb, 2009; Marlow, 2002; Muravyev, Talavera, & Schafer, 2009). We refer to this phenomenon as the second glass ceiling. The second glass ceiling sounds like an entrepreneurship corollary to the first glass ceiling concept, but instead of centering on the corporate advancement ladder it centers on the capital markets that serve small firms. The second glass ceiling prevents women-owned small firms from reaching their full entrepreneurial potential. We suggest the cost of this second glass ceiling is born by the entire economy.

The body of scholarly literature on this phenomenon we call the second glass ceiling is growing. In building our evidence for the existence of the second glass ceiling, we cite recent empirical studies (e.g., Bellucci, Borisov, & Zazzaro, 2010; Muravyev, Talavera, & Schafer, 2009) and new descriptive data on the state of women-owned businesses (e.g., American Express, 2011). Clearly, owning and running a small firm is not the same thing as starting an entrepreneurial venture. The current evidence of the second glass ceiling, however, suggests the phenomenon affects both types of business person. Therefore, we switch between use of the terms “entrepreneur”, “small business owner”, and the more general “woman business owner” to reflect the term(s) used by the studies we cite. Unfortunately, evidence of this phenomenon has not yet made its way into the consciousness of financial capital managers and the female entrepreneurs (nascent and current) who hold the keys to mitigating the deleterious effects of the second glass ceiling. The purpose of this paper is to (1) raise awareness of the second glass ceiling and its costs to society, (2) describe its causes and effects, and (3) propose ways that both women entrepreneurs and financial capital managers can crack this ceiling. We hope to widen the conversation about the second glass ceiling so that it, like the first glass ceiling, might become broadly recognized. Ultimately we hope this conversation will help to remedy the systemic biases against women executives at both large (first glass ceiling effect) and small (second glass ceiling effect) firms.

The First Glass Ceiling

The term glass ceiling refers to the phenomenon that results in a disproportionately low number of women senior executive officers at large corporations. The term is a metaphor for an unseen, but real, barrier to this pinnacle of career advancement (Morrison et al., 1992; US Department of Labor, 1991). Morrison et al (1992) reported on a comprehensive study of Fortune 100 firms that found women are not promoted into senior executive positions for seemingly gender-based reasons. This book – and the study on which it was based – raised the awareness of this gender bias so effectively that it influenced the US Congress to protect women against such biases in the Civil Rights Act of 1991 and the Department of Labor’s “Glass Ceiling Initiative.”

Together, it would be reasonable to expect this research, legislation, and general awareness of the glass ceiling phenomenon would correct this systemic bias against women in the corporate workplace. In the ten year period 1987 through 1996, however, there was no change in the number of women CEOs among the largest corporations – and no evidence of women progressing towards the CEO position (Daily, Certo, & Dalton, 1999). A comprehensive census of Fortune 1000 top executives in the year 2000 did support a prediction that the number of women CEOs in this population will slowly increase through the year 2016 (Helfat, Harris, & Wolfson, 2006). But as of this writing in 2011, still only 26 of the Fortune 1000 companies (2.6%) have women CEOs. Current research also indicates that the first glass ceiling still exists: an Institute of Leadership and Management (2011) survey of 3,000 managers finds that 73 percent of women believe their progress is impeded by this barrier (see also Spangler, Britt, & Parks, 2008).

This severe and persistent glass ceiling bias explains an important feature of corporate behavior. Appropriately, the first glass ceiling is commonly taught in business school courses, hopefully in a pedagogically edifying way that is neither a self-fulfilling prophecy nor perceptible fait accompli for both male and female students who aspire to ascend the stairs someday to senior management at large firms.

Covering the glass ceiling in a business course helps to identify common frustrations and dissatisfactions experienced by senior executives in large corporations. It also provides an opportunity for students to hypothesize about the costs this bias levies on corporations, in particular, and society, in general (Mills, 1997). The prevalence of glass ceiling-related content in multiple business courses may very well help to correct this bias in the corporate workplace over time. It is plausible that some of the first students to be exposed to the glass ceiling in the classroom are only now nearing the corporate senior executive positions from which they can conceivably counteract the prevailing bias by promoting and rewarding qualified women to senior positions. For many professional women, though, their need for challenge, achievement, and status is currently left unfulfilled in corporations. The continuing exodus of women out of corporations is seemingly emblematic of the lack of opportunities and flexibility they perceive in large companies (Center for Women's Business Research, 2009). Perhaps because of this slow rate of change in corporate behavior many more women are choosing to enter self-employment than men (National Women's Business Council, 2007).

Researchers suggest a common motivation for professional women to leave corporate jobs and start their own firms is that self employment gives them greater control over their careers and, therefore, is a way to escape the glass ceiling phenomenon (Mattis, 2004; Orhan & Scott, 2001; Winn, 2004). One study conducted by the National Foundation for Women Business Owners found 16 percent of women entrepreneurs cite a glass ceiling as a major motivation for becoming an entrepreneur (Coughlin & Thomas, 2002). Nascent entrepreneurs of all types (not just women) commonly cite a need for independence, a desire to escape the constraints of a formalized organization, and frustrations with the progress of their career as reasons for wanting to start their own firm (Carter & Jones-Evans, 2006).

The Second Glass Ceiling

Regardless of why more women are starting and leading small firms, we point out they are experiencing another gender bias in this role. This phenomenon, which we refer to as the second glass ceiling, is that women business owners face a systemic disadvantage in acquiring the financing they need to start new firms and to fuel the growth of existing small firms. Acknowledgements of this phenomenon are now emerging in research on entrepreneurship and small firm management. To appreciate the significance of the second glass ceiling, it is essential to start by acknowledging the importance of (a) small firms to the economy and (b) women to those small firms.

Importance of Women Entrepreneurs

Small firms are non-trivial contributors in any economy. Small firms are defined by the US Small Business Administration (SBA) as independent businesses having fewer than 500 employees. Firms of this size represent 99.9 percent of the 29.6 million businesses in the US and employ over half of all private sector employees (SBA, 2011a). The implication for management educators is that available teaching materials (e.g., most cases, videos, newspaper articles) focus primarily on the other 0.10 percent of the firms in our economy and, therefore, miss the potential to accurately portray what drives over half of the US gross domestic product (SBA, 2011a). This omission in management education could subconsciously affect the mindset of those aspiring, male financial capital managers who are sitting in the undergraduate and graduate business classroom.

It is also important to recognize women play a much larger role in the world of small firm leadership than they do in corporate leadership. In 2011 women own 8.1 million businesses in the US. These firms generate $1.3 trillion in revenues and employ 7.7 million workers (American Express, 2011). The current trends indicate the number of women-owned businesses is growing at one and a half times the rate of all US firms (American Express, 2011, based on the most current US Census Bureau data). Worldwide, more women than men are forming new firms, a phenomenon which has led to a renewed attention on gender entrepreneurship (Herrington, 2007). In recent years most developed nations have witnessed a substantial increase in the number of female business founders and their contribution to economic growth and job creation (GEM, 2010; Lee & Denslow, 2005).

Higher numbers of entrepreneurs alone do not impact a national economy through entrepreneurship. Rather, quality measures like growth, innovation, and internationalization are important to consider (GEM, 2010). New women-owned business research and data reflect that the growth rate in the number of women-owned businesses is illusory and contradictory in terms of sustainable firm growth (American Express, 2011). Indeed, we submit that the second glass ceiling exists only in the unequal access to capital, not the ability and proclivity of the vast majority of women entrepreneurs to stoically start and finance their own businesses from out of their own purses.

New data confirm a crucial phenomenon: Even as women-owned businesses continue to grow at rates exceeding the national average in the US, these firms "are not moving along the growth continuum" (American Express, 2011: 3). Although women-owned firms continue to diversify in all industries, they still account for just 29 percent of all enterprises, employ only six percent of the country's workforce, and contribute just under four percent of business revenues (American Express, 2011). Moreover, the employment and sales growth of women-owned companies between 1997 and 2011 (eight percent and 53 percent, respectively) lags the national average (17 percent and 71 percent). Men-owned businesses are, on average, larger than women-owned businesses – about twice as many have 10 or more employees and three times as many have reached the $1 million revenue mark (American Express, 2011).

The American Express Open Report (2011) suggests women are not, in general, running lifestyle businesses and are not keeping their firms small by choice. Instead, lurking below this new data is a sobering caveat about the future of women entrepreneurship: "…something is putting women-owned firms off their stride as they grow larger; they fall behind toward the end of the entrepreneurial marathon, when entering the 100-employee and million-dollar anchor leg of the race" (American Express, 2011: 4). With an unknown "something" causing many women-business owners to fall short of their full entrepreneurial potential, the GDP and job creation ramifications are huge. Apropos, the authors of the American Express Open Report describe the report as a "mix of progress and paralysis" (2011: 3).

Other recent research is beginning to echo this cautionary observation that an unknown "something" is causing many women entrepreneurs to trip on the stairs of entrepreneurial growth. There is "tremendous untapped and unrealized potential for these businesses to make an even greater contribution to the nation's economic health, particularly in the critical area of job creation" (National Women's Business Council, 2010: 2). We submit that this "something" is the access to capital barrier that we call the second glass ceiling.

Evidence of the Second Glass Ceiling

With all of the progress among women entrepreneurs it might seem hard to believe they face gender-based barriers when seeking financial capital for their new ventures. This is especially surprising given the average woman-owned firm is no different from other firms in terms of bill payment behavior, financial stress, and overall creditworthiness (National Women's Business Council, 2008). Still, the evidence that women face a systemic disadvantage in finding, accessing, and managing capital at the small firms they lead – is accumulating (*for the earliest work see* Aldrich, Elam, & Reese, 1997; Brush, 1997; Carter & Rosa, 1998; Marlow, 2002). Strong evidence of the second glass ceiling is now emerging from rigorous empirical studies. Bellucci, Borisov, and Zazzaro (2010) find compelling support that women entrepreneurs experience tighter credit availability from banks even after controlling for observable borrower characteristics and unobservable differences in riskiness and entrepreneurial ability. Using particularly carefully designed methods, Muravyev, Talavera, and Schafer (2009) employ a multi-country database of 14,000 firms to show that women-managed firms are five percent less likely to get a bank loan approved compared to men. Furthermore, when women-managed firms *do* get a bank loan, they pay, on average, half a percentage point more in interest. The multi-

stage regression methods in this study explicitly handle numerous potentially confounding factors including sample selection bias by accounting for (a) discouraged borrowers who acknowledged a need for bank financing but did not apply for a loan, (b) those who were unsuccessful attaining a loan, and (c) those who were successful. Realizing women who anticipate discrimination might refrain from applying for a bank loan, the women-managed firms that do apply likely have superior performance and creditworthiness. Therefore, finding evidence of discrimination in this non-random sub-sample of women who applied provides an especially conservative test. Other controls in this study include lagged profitability and capacity utilization (to address the potential endogeneity problem wherein loan approval might affect firm performance), diversification of the firm's revenue sources, membership in business associations (to control for possible network benefits), use of an external auditor (to acknowledge financial transparency effects), export opportunities (to account for growth potential), firm age, employment, reputation, potential credit history, and number of competitors (Muravyev, Talavera, & Schafer, 2009).

Beyond women's comparatively constrained access to bank loans, the second glass ceiling as we define it includes reduced access to equity capital. Analysis of a longitudinal survey of almost 5,000 entrepreneurial firms shows that not only do women get significantly less external debt and equity than men at firm startup, they also get significantly less capital in the subsequent two years (Coleman & Robb, 2009). Coleman and Robb's (2009) findings are robust even after controlling for several firm (e.g., legal ownership structure, initial startup capital, sales, intellectual property, and comparative advantage) and owner characteristics (e.g., start-up experience, work experience, education, and age).

One of the primary roles of the SBA is to help small firm owners get bank loans and equity when they might not qualify through normal financing channels. SBA-backed loans are three to five times more likely to be made to minority and women-owned businesses than conventional small business loans made by banks (SBA, 2009). The SBA's own research, however, shows the greatest challenge for women-owned firms is access to capital, credit, and equity (SBA, 2005). As of May 6, 2011, women-owned businesses received 12 percent of the dollars and 17 percent of the loans and equity investments made year-to-date by the SBA in FY 2011 (SBA, 2011b). More specifically, in 2008 women-owned firms received an average of $165,073 in SBA-backed loans and equity investments compared to the overall per-firm average of $242,090 (National Women's Business Council, 2008). Whether women are getting denied access to capital or they are simply not seeking it, these figures are conspicuously low considering women are starting more new firms than men in the US – and that their firms exhibit the same financial strength and creditworthiness of the average firm. Women-owned businesses also receive a disproportionately small amount (well under 10 percent) of venture capital (Brush et al., 2004).

While venture capital is a vital source of financing for start-up companies, numerous researchers have noted that it is not the most pervasive, nor arguably the most crucial, source of private equity financing for new ventures (e.g., Becker-Blease & Sohl, 2007). Contrarily, angel investors are the significant source of seed and start-up capital for entrepreneurial ventures in the U.S. and Europe, and the acquisition of angel capital can be a vital step in ultimately receiving venture capital (Becker-Blease & Sohl, 2007). Lamentably, the angel capital market appears to

mimic the venture capital market with respect to female business owners only receiving a small fraction of overall investment dollars; although this pattern is reflective of the low rate with which females appear to seek financing from angel investors (Becker-Blease & Sohl, 2007) . There is even a strong suggestion from bankruptcy research that the second glass ceiling (lower access to capital) is one of the pitfalls that collectively sends women entrepreneurs into bankruptcy disproportionately as compared to male entrepreneurs. In a recent seminal study, Efrat (2010) finds female-owned businesses are over represented in the bankruptcy population in the U.S. Efrat suggests women's business problems are attributable, in part, to six factors: inferior human capital, lower earnings, lower capitalization, smaller size of business, *lower access to capital*, and greater reliance on high cost financing (2010: 548).

Evidence of the second glass ceiling is now arising all around the world. A World Bank Report (2010) on gender parity for entrepreneurs and workers notes that women across the globe typically start their businesses with lower levels of capital than men. Throughout the European Union, barriers prevent women entrepreneurs from equal access to bank loans and venture capital (Panopoulos, 2010). Roper and Scott (2009) show that women in the U.K. are about 7.4 percent more likely to perceive financial barriers to business start-up than men. Among female Bosnian entrepreneurs, 54 percent report that obstacles prevent them from accessing formal credit (World Bank, 2010). In Italy women pay more for overdraft facilities than do men, yet there is no evidence that females are a greater risk. Similarly, businesses run by women in Eastern Europe and Central Asia are less likely to obtain bank loans than businesses managed by men (World Bank, 2010). Signaling an acknowledgement of this problem, the European Parliament and the Council of the European Union passed a binding law in 2004 that addresses direct and indirect gender discrimination in both employment and the supply and access to goods and services. This law might pave the way for a future female E.U. entrepreneur to sue a national bank or venture fund for gender discrimination (Panopoulos, 2010).

Causes of the Second Glass Ceiling

The available research related to the phenomenon we identify as the second glass ceiling has not clearly pinpointed its causes. Still, several explanations from the larger gender bias literature are logically plausible. Perhaps the most general explanation is that people naturally identify themselves and others with groups based on some characteristic(s). Even when they have no prior interactions with people in another group (an "outgroup"), people tend to treat members of that outgroup differently simply because they are different (Tajfel, 1970). Research suggests this behavior is not intentionally malevolent. Brewer (1979), for example, reports people are more likely to show favoritism towards ingroup members than derogation towards outgroup members. Messick explains, "People who perceive themselves to be members of the same group – members of an ingroup – are more likely to help each other than people who are members of different groups. … The ingroup specifies the group within which preferential treatment is the norm" (Messick, 1994: 6). The use of gender as a grouping criterion is widely observed in sociological research (Kite, 2001). People feel most comfortable working with others of their own gender based on deeply-held gender stereotypes (Blau, Ferber, & Winkler, 2006; Kite, 2001). Thus, as long as there are many more males than females at banks and investment

firms in positions to allocate financial capital, it follows that males who seek capital may receive a disproportionate share, all else equal (Fitzgerald et al., 1997).

Very few women hold decision-making positions in the overwhelmingly male (91 percent) venture capital industry (Nelson, Maxfield, & Kolb, 2009). As a consequence, Alsos, Isaksen, and Ljunggren (2006: 681) note that the "dominance of men in the supply side of the finance market may have consequences for profiles, strategies, and means of this sector, including the industries and types of businesses that are pursued, criteria for project evaluation, [and] information strategies."

As a referral-reliant industry, the venture capital industry "creates a significant barrier" for women entrepreneurs because it is less likely that their networks will overlap with the financial supplier network, in spite of any effort that these female entrepreneurs might expend networking and pursuing capital (Gatewood et al., 2009). In the context of the venture capital industry being so referral-centric, this demonstrates how an informal, but entrenched protocol in the industry can aggravate a gender bias.

Some instances of discrimination may be due to personal animus among individuals. It seems likely, however, that given its prevalence, the bias underlying the second glass ceiling is not *always* malignant (Fitzgerald et al., 1997). Miller reports that "venture capitalists uniformly say they wouldn't turn down a promising start-up simply because a woman founded it" (Miller, 2010: B9). Tying this argument to the ingroup favoritism logic above, a commonly shared point of view in our ethics classroom is, "It's not that I don't like working with women (men), it's just that I like working with men (women) better." Ultimately, the measurement complexities inherent in studies of decision making will make it impossible to precisely determine the exact portion of the overall second glass ceiling phenomenon attributable to personal animus (Blau, Ferber, & Winkler, 2006).

The second glass ceiling might also be attributable to a common interpretation of the nature of males and females that the former is biologically programmed to put forth increasing effort as provider and protector whereas the latter is programmed to be compliant and nurturing (Blau, Ferber, & Winkler, 2006; Kite, 2001). One of "the most long-standing and pernicious [gender] stereotypes is that men are business leaders and women are not" (Godwyn & Stoddard, 2011: 73). People who accept this (easily) debatable generalization (note that 90 percent of all women business owners say they want to grow their firms (National Women's Business Council, 2007; Brush et al. 2001)) could be expected to allocate more capital resources to men than women entrepreneurs as they would expect greater return on investment from male-led ventures. Hadary (2010) suggests the stereotype that women do not have the capabilities to lead substantial, growing businesses is pervasive among business and government leaders. She also points to some women's own perceptions of incompetence as a key reason why others do not believe their firms will grow (Hadary, 2010).

Others have also suggested the bias we call the second glass ceiling is partially supported and driven by women entrepreneurs who perceive they will face a financial barrier to capital markets. Indeed, women are about 7.4 percent more likely to perceive financial barriers to business start-up than men (Roper & Scott, 2009). This is plausibly related to the more general

findings that females tend to have lower confidence than men in many business settings. For example, Taylor and Hood (2010) find that female managers are three times more likely than men to underestimate their bosses' assessment of their performance. The fact that women do better work than they realize arguably serves as a gender barrier.

In a recent study of 3,000 managers, women report lower self-belief and confidence than men, suggesting many women take a comparatively cautious approach to business decisions (Institute of Leadership and Management, 2011). Bellucci, Borisov and Zazzaro (2010) also find women business managers tend to perceive events as riskier and to be more risk-averse than men, particularly in the areas of financial decision making and investments. In a study that tracks high growth companies, men appear to understand how leverage can support growth better than women, with 52 percent of the male-owned firms incurring debt funding for growth compared to only 29 percent of women-owned firms (Klein, 2010). To the extent that women's own attitudes and behaviors contribute to the second glass ceiling, as these studies imply, empirical studies should consider the population of discouraged entrepreneurs in addition to those who sought external financing.

An ongoing research program, called The Diana Project, is searching for the causes of the shortage of women seeking and receiving venture capital for their businesses. The thesis of this program is that widely-held gender biased myths about the aspirations, skills, and behaviors of women entrepreneurs are effectively preventing them from acquiring the venture capital funding they need (e.g., Brush et al. 2001**;** Carter et al. 2003). Women business owners who subscribe to the Diana myths are less likely to emphasize growth planning for their ventures or to ask for large amounts of financial capital. The result is that they often do not accumulate the business records and projections that capital providers require (Hadary, 2010).

A rational venture fund manager or angel investor would not reject good ideas and plans to make a profit from any entrepreneur. Still, in a comparison of gender differences in new firm financing, Coleman and Robb (2009) note that prior startup experience is not typical of women entrepreneurs. We submit the second glass ceiling evidence provided here suggests a fund manager operating without this knowledge might be somewhat less than unbiased in making funding decisions. Like other recently identified decision making biases and heuristics that challenge the standard rational-man assumption (e.g., Kahneman & Tversky, 1979), a systemic gender bias will remain influential as long as it remains unrecognized.

Effects of the Second Glass Ceiling

The second glass ceiling affects individual entrepreneurs and, in aggregate, the health of the entire economy. Individual entrepreneurs who face great difficulties attracting outside capital often choose to emphasize bootstrap financing techniques such as funding their growth with credit cards or internal business earnings. The choice to fund a venture with credit cards constrains growth due to the comparatively high cost of this capital source. Compared to external capital sources, the choice to use internally generated funds also constrains a firm's growth rate. Even when women are successful accessing venture capital funding, as a result of the second glass ceiling they get 40 percent less capital, on average, compared to males (Miller, 2010).

Another effect of the second glass ceiling is seen when women adjust their aspirations by choosing to enter industries, such as retail or personal services, because they have lower capital requirements (Hadary, 2010). The extent of this effect, however, is arguable as some 2011 evidence suggests women-owned firms are growing in all industries of the U.S. economy, with the greatest growth rates seen in education services (up 54 percent), administration and waste services (47 percent), and construction (41 percent), and that few industries can continue to be labeled non-traditional for women (American Express, 2011: 2-3).

In the context of access to credit morale, women entrepreneurs are not far from the doldrums. The Center for Women's Business Research's Women Confidence Index (2010) reports that women business owners continue to cite problems getting loans. More women business owners are seeking credit, but fewer report that they are getting all of the credit they want (9.5 percent versus 6.3 percent) and more report that they are getting none of the credit they want (20 percent in 2009 versus 25 percent in 2010). Even for firms with higher annual revenues (greater than $500,000) only 10.3 percent receive all the credit they want, while 65.5% state that they are able to obtain at least some, most, or all credit sought. In contrast, only a third (33.3 percent) of those with smaller annual revenues (less than $500,000) are able to obtain at least some, most or all credit sought (Center for Women's Business Research, 2010).

These micro-level effects of the second glass ceiling aggregate to significant macro-level effects. Women who do not get the financial capital they need must delay their firms' growth or reduce the scale of their growth goals. Thus, women entrepreneurs are not realizing the full potential of their new ventures (Marlow & Patton, 2005; National Business Women's Council, 2010a). With over $1 trillion of business currently generated by women-led firms, a substantial proportion of the US's development potential is curtailed by the second glass ceiling. The scale of this impact may be even more staggering in the near future. If the number of female enterprises doubles in the next ten years as predicted (Groom, 2009), it follows that as much as $2 trillion of our economy could be subdued by the second glass ceiling.

Furthermore, restricting the growth of women-owned firms likely has a multiplier effect on all women in the labor force. This is because women-owned firms employ a nearly balanced workforce of 52 percent women/48 percent men, while men-owned firms employ, on average, 38 percent women/62 percent men (National Women's Business Council, 2007). So by constraining the growth of women-owned firms, society also constrains the hiring of women employees more generally in the small firm segment of the economy that represents over half the US GDP. It seems a reasonable assumption, then, that the second glass ceiling could cost society more in lost economic potential and labor loss than the first glass ceiling.

Discussion: Remedies for the Second Glass Ceiling

To the extent people treat other members of their gender preferentially, as discussed above, the second glass ceiling will weaken when more female capital providers interact with more female business owners. Women should be encouraged to follow their strong tendency to professionally network with others of their same gender (Miller, 2010). Women business owners can gain credibility and legitimacy by joining networks of bankers, venture capitalists, customers

and other local entrepreneurs that are dense with other women (Hadary, 2010). Placing more women in positions to allocate capital will help. The payoff, Hadary (2010) argues, is that women business owners are more likely to receive the funding they need when they work with other women. In a promising networking development that seeks to integrate East Coast women into West Coast investing networks and to improve market conditions for female entrepreneurs, fifty of some of 'the most successful, financially independent women in the world' recently were invited to an event in Silicon Valley (Ryckman, 2010: B10). Networking activities can also serve a less direct remedy of the second glass ceiling by helping women identify more female role models and mentors. Mentors who stress the importance of growth planning for women entrepreneurs, for example, would directly address this hypothesized cause of the second glass ceiling.

Since financial capital managers might miss out on potential wealth creation projects from women entrepreneurs due to gender insensitivity (Alsos, Isaksen, & Ljunggren, 2006; Gatewood et al., 2009), these managers may need to "screen specifically for women-owned businesses with a growth potential, and to evaluate the financial capital need in these businesses" (Alsos, Isaksen, & Ljunggren, 2006). Wells Fargo should be applauded for its initiative in establishing a $10 billion loan fund for women-owned businesses (Lawson, 2010).

Women business owners can also benefit by strengthening their professional relationships more generally (i.e., including those with men). Women are believed to have comparative strength in relationship building and maintenance (Blau, Ferber, & Winkler, 2006; Kite, 2001). Providing mechanisms or events through which women entrepreneurs will be introduced to more investors (of both genders) should help them to initiate more productive relationships. Another way to proactively address the second glass ceiling is for women to apply this capability to their relationships with their bankers. Small firm managers who establish interpersonal relationships with a primary banker and concentrate their use of financial services with that banker enjoy benefits in both access and cost of capital (e.g., Bosse, 2009).

On the angel capital front, it is encouraging to note that increasing the visibility and number of female business angels might attract more deal flow from women entrepreneurs (Harrison & Mason, 2007). By way of industry analogy, some evidence exists that even though female venture capitalists do not actively canvass female entrepreneurs, they may attract more deal flow from female entrepreneurs due to their visibility (Harrison & Mason, 2007).
On the cutting-edge of alternative financing options for women entrepreneurs are royalty financing and crowd-funding networks. Historically found in industries like mining, film production and drug development, royalty financing is making its way into the technology industry and other early-stage firms with growth potential (Austin, 2010). Under this financial arrangement, a company pays back a loan using a percentage of revenue (Austin, 2010). Crowd-funding is a way for entrepreneurs to tap directly into their social media network to find cash for start-ups or expanding, usually for amounts less than $10,000, with investors often being promised just nominal compensation such as coupons or free samples of a product (Maltby, 2010). As for the future of crowd-funding, the vice president of entrepreneurship at the Kauffman Foundation, a research organization dedicated to start-ups, predicts that this movement is the paradigm-busting genesis for the disruption of the traditional channels for

entrepreneurial funding (Maltby, 2010). Although promising on paper, royalty financing and crowd-funding networks are not without their caveats.

Raising awareness of the second glass ceiling among both women entrepreneurs and financial capital managers could ultimately begin reversing the effects described above. Women entrepreneurs and financial capital managers should be encouraged to adopt a sensitive perspective and try to do everything they can to become neither a victim of the second glass ceiling nor a perpetuator of its invidious effect. A 2004 *Business Week* article on the continuing first glass ceiling effect, for example, reports that many men are willing to reform their thinking once they have been educated about their biases (Di Meglio, 2004). Perhaps the disappointingly slow progress regarding the first glass ceiling will be accelerated by introducing the second glass ceiling to the conversation about gender biases in business.

The increased awareness of these phenomena may lead to more commitment and action among individuals which may, in turn, lead to more macro-level changes in laws, policies, and social norms that 'level the field' for women professionals. Given that gender discrimination is illegal under the Equal Credit Opportunity Act as amended in 1974, it is perhaps surprising that thoroughly searching the Lexis Nexis Law Review database turns up no evidence of lawsuits relevant to the second glass ceiling. At least two possible explanations exist. First, most individual entrepreneurs who are seeking external capital are too cash- and time-strapped to launch or sustain a lawsuit to an actual verdict or judgment. Second, the second glass ceiling has a long way to go to reach the level of consciousness required to support a class action suit.

Conclusion

Future research will undoubtedly deepen our understanding of the second glass ceiling phenomenon**.** Our position is that while research is revealing a second glass ceiling that presents a serious challenge to business people today, it has not yet been recognized in the entrepreneurship community. This presents a unique economic growth opportunity to cover a broad pattern of behavior that clearly has important implications for behavior – at both large corporations (at least to the extent women choose to leave and form small firms) and small firms. Given that the cost of this second glass ceiling is borne by the entire economy, society ignores this phenomenon at its own financial and growth peril, especially during economically anemic periods. Indeed, in the "heart of the Great Recession," a "soaring" number of minorities and women were starting their own businesses and were expected to "fuel" much of the job growth over the next decade (Morello, 2010: A14).

Entrepreneurship is a "vital and promising venue" for females to be more completely integrated into the labor market (Efrat, 2010: 548). In advancing toward this sustainability goal, it is imperative to address some of the root causes that impede the success of many women-owned small businesses, one of them being the second glass ceiling. Indeed, women entrepreneurs should not have to experience a financial capital penalty for simply being women.

References

Aldrich, H., Elam, A., & Reese, P. (1997). Strong ties, weak ties and strangers: Do women differ from men in their use of networking to obtain assistance? In S. Birley & I. MacMillan (Eds), *Entrepreneurship in a Global Context*. London: Routledge.

Alsos, G.A., Isaksen, E.J. & Ljunggren, E. (2006). New venture financing and subsequent business growth in men- and women-led businesses. *Entrepreneurship Theory & Practice*, 30(5), 667-686.

American Express. (2011). The American Express OPEN State of Women-Owned Business Report: A Summary of Important Trends, 1997-2011. American Express: New York City. http://media.nucleus.naprojects.com/pdf/WomanReport_FINAL.pdf

Austin, S. (2010). Alternative financing option: entrepreneurs going the royalty route use a share of revenue to pay back loans. *Wall Street Journal*, Dec. 2, B6.

Becker-Blease, J.R. & Sohl, J.E. (2007). Do women-owned businesses have equal access to angel capital? *Journal of Business Venturing*, 22 (4), 503-521.

Bellucci, A., Borisov, A., & Zazzaro, A. (2010). Does gender matter in bank-firm relationships? Evidence from small business lending. *Journal of Banking & Finance*, 34, 2968-2984.

Blau, F.D., Ferber, M.A., & Winkler, A.E. (2006). The Economics of Women, Men, and Work, 5th Ed. Upper Saddle River, NJ: Pearson Prentice Hall.

Bosse, D.A. (2009). Bundling governance mechanisms to efficiently organize small firm loans. *Journal of Business Venturing*, 24, 183-195.

Brewer, M.B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86, 307-324.

Brush, C. (1997). Women owned businesses: Obstacles and opportunities. *Journal of Developmental Entrepreneurship*, 2(1), 1-25.

Brush, C., Carter, N., Gatewood, E., Greene, P., & Hart, M. (2001). *The Diana Project: Women business owners and equity capital: the myths dispelled*. Kaufman Center for Entrepreneurial Leadership, Kansas City, KS.

Carter, N.M., Brush, C.G., Greene, P.G., Gatewood, E. J., & Hart, M. (2003). Women Entrepreneurs Who Break through to Equity Financing: The Influence of Human, Social and Financial Capital. *Venture Capital*, 5(1), 1-29.

Carter, S. & Jones-Evans, D. (2006). *Enterprise and Small Business: Principles, Practice and Policy*, 2nd Ed. Harlow: Prentice Hall.

Carter, S. & Rosa, P. (1998). The financing of male and female owned businesses. *Entrepreneurship and Regional Development*, 10(3), 225-241.

Carter, S., Shaw, E., Lam, W., & Wilson, F. (2007). Gender, entrepreneurship, and bank lending: The criteria and processes used by bank loan officers in assessing applications. *Entrepreneurship Theory and Practice*, 31(3), 427-444.

Center for Women's Business Research. (2009). *The Economic Impact of Women-Owned Businesses in the United States*. Center for Women's Business Research: McLean, VA.

Center for Women's Business Research. (2010). *Key4Women Confidence Index*. Center for Women's Business Research: McLean, VA.

Coleman, S. & Robb, A. (2009). A comparison of new firm financing by gender: Evidence from the Kauffman firm survey data. *Small Business Economics*, 33, 397-411.

Coughlin, J.H. & Thomas, A. (2002). *The Rise of Women Entrepreneurs*, Quorum Books, Westport, Connecticut.

Daily, C.M., Certo, S.T., & Dalton, D.R. (1999). A decade of corporate women: Some progress in the boardroom, none in the executive suite. *Strategic Management Journal*, 20, 93-99.

Brush, C., Carter, N., Gatewood, E., Greene, P., & Hart, M. (2004). *Gatekeepers of Venture Growth: A Diana Project Report on the Role and Participation of Women in the Venture Capital Industry*. Kauffman Foundation, Kansas City, Missouri.

Di Meglio, F. (2004). Breaking B-school gender barriers. *BusinessWeek*, 1 December.

Efrat, R. (2010). Women entrepreneurs in bankruptcy. *Tulsa Law Review*, 45, 527-549.

Fitzgerald, L.F., Drasgow, F., Hulin, C.L., Gelfand, M.J., & Magley, V.J. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology*, 82(4): 578-589.

Gatewood, E.J., Brush, C.G., Carter, N.M., Greene, P.G., & Hart, M.M. (2009). Diana: a symbol of women entrepreneurs' hunt for knowledge, money, and the rewards of entrepreneurship. *Small Business Economics,* 32(2), 129-144.

GEM. (2010). *Global Entrepreneurship Monitor 2010 Global Report*. Global Entrepreneurship Research Association: Boston.

Godwyn M. & Stoddard, D. (2011). *Minority Women Entrepreneurs: How Outsider Status Can Lead to Better Business Practices*. Stanford Business Books, Stanford: California.

Groom, B. (2009). Recession spurs rise of 'lipstick entrepreneurs'. *The Financial Times*, November, 2.

Hadary, S.G. (2010). What's holding back women entrepreneurs? *The Wall Street Journal*, May 17, R1, R3.

Harrison, R.T., & Mason, C.M. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory & Practice*, 31(3), 445-472.

Helfat, C.E., Harris, D., & Wolfson, P.J. (2006). The pipeline to the top: Women and men in the top executive ranks of US corporations. *Academy of Management Perspectives*, 20(4), 42-64.

Herrington, M. (2007). Women are the lifeblood entrepreneurs of South Africa. *Business Day (South Africa)*, *Economy, Business & Finance*, 19 February, 4.

Institute of Leadership and Management. (2011). *Ambition and Gender at Work*. Institute of Leadership and Management: London.

Jordan, C.E., Clark, S.J., & Waldron, M.A. (2007). Gender bias and compensation in the executive suite of the Fortune 100. *Journal of Organizational Culture, Communications and Conflict*, 11(1), 19-29.

Kahneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2): 263-292.

Kite, M. (2001). Gender stereotypes. In J. Worrell (Ed.), *Encyclopedia of Women and Gender* (pp. 561-570). San Diego, CA: Academic Press.

Klein, K. E. (2010). How women business owners are held back. *Bloomberg Businessweek*, Nov. 2.

Lawson R. (2010). Women take the lead. *Walesbusiness.org*, Jul, 23.

Lee, S. & Denslow, D. (2005). A Study on the Major Problems of U.S. Women-Owned Small Businesses. *Journal of Small Business Strategy*, 15(2), 77-89.

Maltby, E. (2010). Tapping the crowd for funds: entrepreneurs reach out to investors through social networks, sites for capital. *Wall Street Journal*, Dec. 9, B1.

Marlow, S. (2002). Self employed women: Apart of, or apart from, feminist theory? *Entrepreneurship and Innovation*, 2(2), 83-91.

Marlow, S., & Patton, D. (2005). All credit to men? Entrepreneurship, finance, and gender. *Entrepreneurship Theory & Practice*, 29(6), 717-735.

Mattis, M.C. (2004). Women entrepreneurs: Out from under the glass ceiling. *Women in Management Review*, 19(3), 154-163.

Messick, D.M. (1994). Social categories and business ethics. *The Ruffin Lectures in Business Ethics*. Charlottesville, VA: The Darden School, University of Virginia. pp. 1-37.

Miller, C.C. (2010). Out of the loop in Silicon Valley. *The New York Times*, April 18, B1, B8-9.

Mills, A. (1997). Gender, bureaucracy, and the business curriculum. *Journal of Management Education*, 21(3), 325-342.

Morello, C. (2010). Before downturn, opportunities boomed. *Washington Post,* July 14, A14.

Morrison, A.M, White, R.P., & Van Velsor, E. (1992). *Breaking the Glass Ceiling: Can Women Reach the Top of America's Largest Corporations?* Addison-Wesley: Reading, MA.

Muravyev, A., Talavera, O., & Schafer, D. (2009). Entrepreneurs' gender and financial constraints: evidence from international data. *Journal of Comparative Economics*, 37(2), 270-286.

National Women's Business Council. (2007). *Women Business Owners and their Enterprises*. National Women's Business Council: Washington, DC.

National Women's Business Council. (2008). *Trends in SBA-Backed Financing to Women-Owned Businesses.* National Women's Business Council: Washington, DC.

National Women's Business Council. (2010). *Launching Women-Owned Businesses on to a High Growth Trajectory.* National Women's Business Council: Washington, DC.

Nelson, T., Maxfield, S., & Kolb, D. (2009). Women entrepreneurs and venture capital: managing the shadow negotiation. *International Journal of Gender and Entrepreneurship*, 1(1), 57-76.

Orhan, M. & Scott, D. (2001). Why women enter into entrepreneurship: An explanatory model. *Women in Management Review*, 16(5), 232-247.

Panopoulos, A. (2010). Barriers to financing: Is European Union indirect discrimination law the answer for female entrepreneurs? *Cardozo Journal of Law & Gender*, 16, 549-572.

Patterson, N. & Mavin, S. (2009). Women entrepreneurs: Jumping the corporate ship and gaining new wings. *International Small Business Journal*, 27(2), 173-192.

Roper, S., & Scott, J.M. (2009). Perceived financial barriers and the start-up decision: An econometric analysis of gender differences using GEM data. *International Small Business Journal*, 27, 149-171.

Ryckman, P. (2010). The risk-taking edge of west coast women. *The New York Times*, Nov. 11, B10.

SBA. (2005). *Availability of Financing to Small Firms Using the Survey of Small Business Finances*. Small Business Administration: Washington, DC.

SBA. (2009). *Helping Small Business Start, Grow and Succeed*. Small Business Administration: Washington, DC.

SBA. (2011a). *Frequently Asked Questions*. Small Business Administration: Washington, DC.

SBA. (2011b). *SBA Leading Statistics for Major Programs: Business Loan Approval*. For the FY2011 period ending May 6, 2011. Small Business Administration: Washington, DC.

Spangler, Britt and Parks. (2008). Wal-Mart and women: good business practice or gamesmanship? *Journal of Applied Management and Entrepreneurship*, 13(2), 14-25.

Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American*, 223, 96-102.

Taylor, S.N. & Hood, J.N. (2010). It may not be what you think: Gender differences in predicting emotional and social competence. *Human Relations*, 64(5), 627-652.

U.S. Department of Labor (1991). *A Report on the Glass Ceiling Initiative*. U.S. Department of Labor, Washington, DC.

Winn, J. (2004). Entrepreneurship: Not an easy path to top management for women. *Women in Management Review*, 19(3), 143-153.

World Bank. (2010). *Women, Business and the Law: Measuring Legal Gender Parity for Entrepreneurs and Workers in 128 Economies: A Pilot Report*. The World Bank: Washington, DC.

About the Authors

Douglas A. Bosse received his PhD in strategic management and entrepreneurship from the Fisher College of Business at The Ohio State University. He is currently assistant professor of management in the Robins School of Business at University of Richmond. Doug's current research examines how firms manage a variety of stakeholder relationships to improve performance. His previous research has been published in *Strategic Management Journal, Journal of Business Venturing, Technovation, Venture Capital,* and *Human Resource Management*.

Porcher L. Taylor III received his B.S. from the U. S. Military Academy at West Point and holds a J.D. from the University of Florida College of Law. He is professor of paralegal studies in the School of Continuing Studies at the University of Richmond. He holds a joint appointment as an associate professor of management in the Robins School of Business at the university. For nearly seven years he practiced law at one of Florida's largest primarily corporate law firms. He has been published in *Columbia Science and Technology Law Review, Frontiers of Entrepreneurship Research* (a "Top 40" paper), *Accounting Horizons,* and *Indiana Law Journal Supplement*, among others. His current research interest is corporate governance and Sarbanes-Oxley Act compliance.